

Claims

1. Composition comprising

5 - at least one polyurethane prepolymer A having isocyanate end groups, prepared from at least one polyisocyanate with at least one polyol A1 and if desired at least one polyol A2, as specified below:

10 A1: linear polyoxyalkylene polyol having a degree of unsaturation < 0.04 meq/g;
A2: polyol in an amount of 0-30% by weight, preferably 0-20% by weight, in particular 0-10% by weight, based on the total amount of A1+A2;

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and

- at least one polyaldimine B.

20 2. Composition according to claim 1, characterized in that the polyol A1 has a molecular weight of 2000-30 000 g/mol, in particular 2000-20 000 g/mol.

25 3. Composition according to one of the preceding claims, characterized in that the degree of unsaturation of the polyol A1 is < 0.02 meq/g, in particular < 0.017 meq/g.

30 4. Composition according to one of the preceding claims, characterized in that the polyol A1 is a polyol prepared by means of DMC catalysis.

35 5. Composition according to one of the preceding claims, characterized in that the polyol A1 is a polyoxypropylene diol or an EO-endcapped polyoxypropylene diol.

6. Composition according to one of the preceding

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claims, characterized in that the polyol A2 is a polyoxyalkylene polyol having a degree of unsaturation > 0.04 meq/mol.

5 7. Composition according to one of the preceding claims, characterized in that the polyol A2 is a polyoxyalkylene polyol having a molecular weight of 400-2000 g/mol.

10 8. Composition according to one of the preceding claims, characterized in that the polyol A2 is a polyoxyalkylene polyol having an OH functionality of greater than 2 and up to about 3.

15 9. Composition according to one of the preceding claims, characterized in that the polyol A2 is selected from the group consisting of the following: 1,2-ethanediol, 1,2- and 1,3-propanediol, neopentyl glycol, diethylene glycol, triethylene glycol, the isomeric dipropylene glycols and tripropylene glycols, the isomeric butanediols, pentanediols, hexanediols, heptanediols, octanediols, nonanediols, decanediols, undecanediols, 1,3- and 1,4-cyclohexanedimethanol, hydrogenated bisphenol A, 1,1,1-trimethylolethane, 1,1,1-trimethylolpropane and glycerol.

20 10. Composition according to one of the preceding claims, characterized in that the polyisocyanate is a diisocyanate.

25 11. Composition according to one of the preceding claims, characterized in that the aldehyde on which the polyaldimine B is based does not have a C-H moiety positioned α to the carbonyl group.

30 12. Composition according to one of the preceding claims, characterized in that the polyurethane

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prepolymer A and the polyaldimine B is present in a ratio of 0.1-1.1 equivalent of aldimine moieties per equivalent of isocyanate groups.

- 5 13. Process for preparing the composition according to one of claims 1-12, comprising a step of preparing a polyaldimine by reacting an aldehyde with an amine in a manner known per se.
- 10 14. Use of the composition according to one of claims 1-12 as an adhesive, sealant, coating or covering.
- 15 15. Arrangement characterized in that it comprises a composition according to one of claims 1-12.
16. Article whose surface has been at least partly contacted with a composition according to one of claims 1-12.
- 20 17. Process for bonding, characterized in that it comprises a step of contacting with a composition according to one of claims 1-12.
- 25 18. Process for sealing, characterized in that it comprises a step of contacting with a composition according to one of claims 1-12.
- 30 19. Process for coating, characterized in that it comprises a step of contacting with a composition according to one of claims 1-12.
- 35 20. Process according to one of claims 17-19, characterized in that it comprises an additional step of curing in the air.
21. Process according to one of claims 17-20, characterized in that it further comprises a step

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of contacting with a hydrous component or an admixture thereof.